PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the existing traffic control signal at the intersection of MD 97 and MD 144 in Howard County, Maryland.

MD 97 is considered to run in a north/south direction.

II. INTERSECTION OPERATION

The intersection is to be modified to operate in a NEMA six (6) phase, full-traffic-actuated mode. There will be an exclusive/permissive left turn phase for both the north and southbound movements of MD 97. The MD 97 through movements will operate concurrently. The MD 144 (Frederick Road) through movements will operate concurrently.

The existing cabinet/controller to be utilized. Video detection equipment is to be installed at this location.

EQUIPMENT LIST

A. S.H.A. furnished equipment material.

B. Equipment to be furnished and installed by the Contractor.

Quo	intity	Units	Description
Lump	Sum	LS	Mobilization.
Lump	Sum	LS	Maintenance of traffic.
	2	EA	12 in., one-way, three section L.E.D. (R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visor
Market Commencer	2	EA	12 in., one-way, five section L.E.D. (R,Y,YA,G,GA) adjustable black face traffic signal head with mast arm mounting hardware and tunnel visor
	2	EA	12 in./8 in., one-way, five section L.E.D. (12 in. YA, GA/ 8 in. R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
	1	EA	Video Detection Panel and Hub (Econolite Terra).
1 5	5 X	EA	Video Detection Comera and Cable (Econolite Terra) (2 - 100 LF, 2 - 300 LF, 1 - 400 LF)
1		-EA	Micro loop probe (set of 3) with 500 ft. lead in cable.
1	- 35	<u>-LF</u>	Sawcut for signal loop detector.
1 4	×	EA	Handhole.
	620	LF	7-conductor electrical cable (No. 14 A.W.G.).
1	-5	4 .F	1 in. liquid-tight-flexible-non-metallic conduit for loop-detector-sleeve.
① ₉₅	XXX	LF	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
1	150	<u></u>	3 in: polyvinyl chloride ESchedule 803 electrical conduit - bored:
	2	EA	NEMA load switch.
	1	EA	Raise handhole frame and cover to grade
Lump	Sum	LS	Remove and dispose of existing signal equipment.
Lump	Sum	LS	As-built for S.H.A. [on CADD].
1	1	EA	27 ft. steel mast arm pole with a 38 ft. mast arm.
1	1.	CY	Test pit excavation.
1	275	LF	Bare copper stranded ground wire (No. 6 A.W.G.).
. 1	3	CY	Concrete foundation for traffic signal equipment.
1	1	EA	Ground rod -3/4in. diameter x 10 ft. length.
	160	LF	3 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted.
1	2	EA	Cut, Clean, Cap, Re-Galvanize Mast Arm/Pole.
1 Lump	Cum	LS	Selective Tree Trimming

CONTACT LIST

The contact persons for District •7 are as follows:

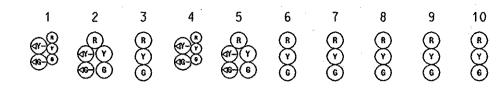
Mr. John Concannon Assistant District Engineer - Traffic 301-624-8140

Ms. Andrea Abend Assistant District Engineer - Utility 301-624-8115

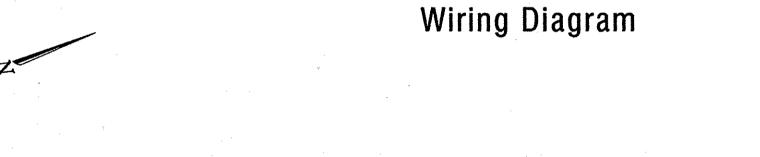
Mr. Dave Coyne Assistant District Engineer - Maintenance 301-624-8105

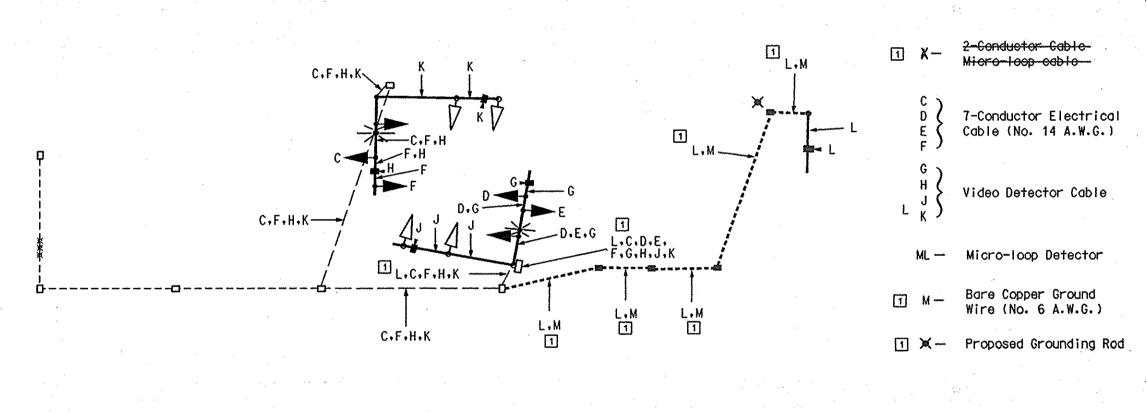
Mr. Richard L. Daff Chief, Traffic Operations Division 410-787-7630

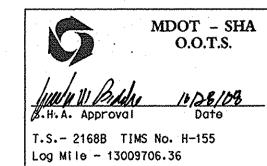
Phase Chart



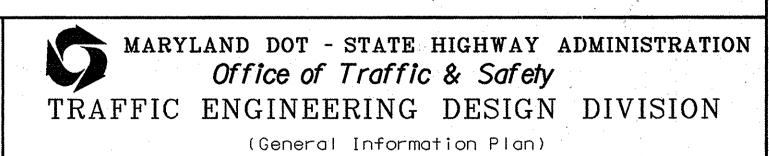
Dh 4 9 E	R	R		R	R	_				<u> </u>	
Phase 1 & 5	- G	- G	R	-	 -G	R	R	R	R	R	
1 & 5 Change to Phase	1 & 6 or	Phase 2	& 5 or 1	Phase 2 a	\$ 6						- €
Phase 1 & 6	G G	G -	G	R	R	R	R	R	R	R	<i>•</i>
1 Change	G -Y	G →Y—	G	R	R	₍ R	R	R	R	R	-
Phase 2 & 5	R	R	R	G 	ု ဂ 	G	R	R	R	R	♦
5 Change	R	R	R	G - 4 -Y	G 	G	R	R	R	R	•
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	*
2 & 6 Change	Y	Y	Y	Υ	Υ	Y	R	R	R	R	
Phase 4 & 8	R	R	R	R	R	R	G	G	G	G	1 4
4 & 8 Change	R	R	R	R	R	R	Y	Y	Υ	Υ.	♦
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	↑ ↑ ↑











MD 97 at MD144

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DRAWN BY: F. Brownle	у F.A.P. NO.	N/A	TS NO.	
CHECKED BY:	S.H.A. NO.	BW996M82	2168B	SHEET NO.
SCALE: N/A	COUNTY:	Howard	T.I.M.S. NO.	
DATE: November	22, 2005 LOG MILE:	13009706.36	<u>H-155</u>	2_ OF2_